



# **City of Scottsdale Water and Wastewater Rate Report**

## **Fiscal Year 2013/14**

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## **I. Summary**

As prescribed by the City of Scottsdale's adopted Comprehensive Financial Policies, the City sets rates for water and wastewater customers based on an annually updated five-year financial plan for each enterprise fund. The five-year plans are used to ensure that rate adjustments generate sufficient revenues to cover costs of serving customers and to maintain adequate reserves in accordance with the City's adopted financial policies. The reserve policies are to provide for contingencies and to stabilize rate increases over the five-year planning period. As part of the comprehensive planning effort, the impact on the combined utility bill is carefully considered in determining the appropriate balance between rate increases and debt financing. To accomplish this objective, the City systematically incorporates marginal rate increases in conjunction with debt financing to avoid acute rate escalations at any point in time.

In accordance with its adopted financial policies, the City completed the annual updates to the comprehensive five-year financial plans that incorporate all projected operating and capital revenues and expenses to determine the cash needs of the Water and Wastewater Enterprise funds. To meet the cost recovery and revenue requirements identified in the updated plans and to achieve rate stabilization over the five-year planning period, the City is proposing a decrease to the lower water tiered rates with increases in wastewater rates in conjunction with planned debt issuances to support the wastewater capital program. Additionally, the City is proposing increases in some miscellaneous water charges to meet cost recovery requirements for services provided to specific customers. As part of the comprehensive planning effort, the impact on the combined utility bill for water and wastewater service was carefully considered in determining the appropriate balance between the proposed rate increases and debt financing. The proposed water rate decrease is forecasted to offset the proposed wastewater rate increase for the typical residential customer.

Based on the updated five-year financial plans, a synopsis of revenue requirements and recommended miscellaneous water charges and rate changes for the water and wastewater enterprise fund are explained below:

**Water** – Revenue requirements for the water enterprise fund are significantly impacted by the long term capital and associated operating impacts of federal water quality regulations (i.e., arsenic and disinfection by-products) enacted by the U.S. Environmental Protection Agency (EPA). Other cost factors affecting the water fund revenue requirements over the five-year planning period include:

- Capital costs for rate-funded water distribution system improvements to address aging infrastructure replacement needs identified through the recently enhanced asset management program effort
- Operating cost increases for purchased water which includes a 6.0 percent price increase to purchase Central Arizona Project (CAP) water for fiscal year 2013/14
- Operating costs for electricity rate increases
- Operating cost increases for compliance with federal regulations
- Operating cost decreases related to treatment filter media replacement including granular activated carbon (GAC) used by water treatment plants to comply with disinfection by-product regulations. The City has partnered with other valley municipalities to share in the cost of a local regeneration facility
- Operating cost decrease related to City wide indirect cost allocations and in-lieu property taxes

To clarify the current water rate design, new definitions for single family residential, multi-family residential, commercial/industrial and landscape/irrigation are proposed which will more accurately reflect the water usage patterns and align them to the proper rate design. Additionally an irrigation specific customer classification has been developed and a separate irrigation rate structure is being proposed effective July 1, 2013. The new irrigation specific rate design is for Multi-Family Residential, Commercial, Industrial and Non-Residential customers as shown below.

This adjustment is forecasted to decrease revenues by 0.5 percent or approximately \$523,500.

Tier #	Rate Per 1,000 Gallons	Gallons of Use
1	\$1.65	0 to 2,500
2	\$2.80	2,501 to 6,000
3	\$3.40	6,001 to 20,000
4	\$3.70	20,001 and Over

Finally water rate adjustments are being proposed effective July 1, 2013 to stabilize revenue collections for the water fund; these adjustments are forecasted to decrease water revenues by 1.0 percent or approximately \$1.0 million.

Overall the proposed rate reductions to the water fund are forecasted to decrease water revenues by \$1.6 million or 1.6 percent.

**Wastewater** - Revenue requirements for the wastewater enterprise fund are significantly impacted by wastewater collection system maintenance and improvements which are essential to ensure regulatory compliance new Capacity, Management, Operations and Maintenance (CMOM) regulations and minimize wastewater system overflows. Other cost factors affecting the wastewater fund revenue requirements over the five year planning period include:

- Capital costs for rate-funded wastewater collection system improvements to address aging infrastructure replacement needs identified through the recently enhanced asset management program effort
- Capital project costs related to the Multi-City Sub-regional Operating Group (SROG) 91st Avenue Wastewater Treatment Plant
- Operating costs from increased electrical rates
- Operating cost increases for compliance with federal regulations
- Operating cost decreases from the renegotiation of an effluent sales contract between the SROG and the Palo Verde Nuclear Generating Station
- Operating cost decreases related to City wide indirect cost allocations and in-lieu property taxes

To address the increased revenue requirements, an increase in wastewater rate revenues is proposed effective July 1, 2013; this adjustment is forecasted to increase wastewater revenues by 4.0 percent or approximately \$1.4 million.

**Water and Wastewater Miscellaneous Charges** - To address cost recovery, several increases to miscellaneous charges are being proposed effective July 1, 2013 to meet the City's financial policy that states charges recover all direct and indirect costs of service. Miscellaneous charges, i.e. same day service, water meter installation, etc. are assessed to specific users of the service so that general rate payers do not bear the burden. Cost drivers that affect miscellaneous charges include; installation of smart meters and the rising percentage of copper in water meters.

Other miscellaneous charges have increased due to increased labor rates which now include fringe benefits and equipment costs which have risen due to higher fuel costs and general inflation.

Water miscellaneous charge adjustments are forecasted to increase revenues by 0.1 percent or approximately \$170,000.

Wastewater miscellaneous charge adjustments are forecasted to increase revenues by 0.1 percent or approximately \$44,000.

## **II. Background**

The City of Scottsdale Water Resources Department's mission is *"to consistently deliver superior quality water and service to the citizens of Scottsdale by continuously ensuring a safe, sustainable drinking water system, operating an innovative water reclamation system and maintaining our position as one of the nations most advanced and efficient water utilities"*.

In order to accomplish this mission, the City incurs costs related to the operation, maintenance and construction of its water and wastewater systems. The following are some of the primary factors affecting the water and wastewater costs of operation and the capital program:

- Compliance with the Groundwater Management Act - With the passage of the Arizona Groundwater Management Act (GMA) in 1980, the Phoenix Active Management Area was created to reduce groundwater withdrawals to a point where "safe-yield" is achieved by year 2025. "Safe-yield" is achieved when the groundwater withdrawals equal the amount of groundwater that is naturally or artificially recharged (i.e., zero groundwater mining). The GMA also requires the City to demonstrate a 100-year Assured Water Supply for existing committed and future demand. This impacts costs in three ways:
  - Source of supply – additional water supplies were obtained and include surface water purchases / leases and/or groundwater recharge in compliance with the GMA
  - Treatment – surface and reclaimed water require more treatment than groundwater
  - Distribution – an increased distribution system is required when treatment is from a central facility rather than from local wells.
- Compliance With Federal And State Water Quality Standards - The Safe Drinking Water Act and the Clean Water Act set the standards for water treatment/delivery and wastewater treatment/collection, respectively. As the level of these standards has become more stringent, the City's compliance costs have also increased. Most recently, the EPA's Arsenic Rule and the Stage 2 Disinfectants and Disinfection Byproducts (DBP) Rule have caused a major escalation of costs for both capital improvements and operating costs. Although the City currently meets Stage 1 requirements of the DBP Rule, in which the regulatory limitation system-wide was lowered from 100 ppb to 80 ppb, the EPA Stage 2 DBP Rule requires a compliance limit of 80 ppb at individual locations.
- Population Disbursement Over Broad And Varying Terrain - The City's population is distributed over 185 square miles. The water system includes 15 service zones due to mountainous terrain. Elevations increase over 2,300 feet, rising generally from the south to the north and east, greatly affecting electricity, maintenance, and distribution costs.

- Major Water Capital Projects

- Water Distribution System Improvements - Provides for water distribution system improvements needed due to increasing system age, as well as increasing demand and fire flow requirements, such as is attributed to Downtown revitalization. This includes replacement of mains, pressure release valves (PRV's), meters and system valves, as well as design and construction of new water mains at various locations throughout the distribution system to improve service and to reduce operating costs. Replacement of existing small mains (4-inches and smaller) is required to meet fire flow requirements as set forth by Ordinance. This project will also include minor design, maintenance and construction modifications to various water treatment plant infrastructure, pump stations and storage tanks as driven by findings of the department's System Asset Management Program. An estimated \$49.3 million will be spent over the next five years to address these needs.
- Chaparral Water Treatment Plant - Design and Construct Pretreatment infrastructure to meet more strict water quality regulations and improve operational performance given new challenges posed by deteriorating source water quality. Disinfectant/Disinfection Byproducts (D/DBP) rules require more aggressive pretreatment of precursors which lead to the undesirable formation of regulated TTHM's. Funds programmed are primarily targeted at immediately addressing infrastructure and operational needs required to achieve compliance with tightened D/DBP standards. This project will address D/DBP rules in addition to optimizing plant performance in response to fluctuating source water quality. In particular, increased turbidity from recent forest fires has introduced solids handling challenges. Enhanced pretreatment measures will more effectively treat variable water quality, as well as assist in optimizing the effectiveness and longevity of the WTP. An estimated \$26.0 million will be spent over the next five years.
- Booster Station Upgrades - Upgrade components of the water production system as needed to meet system demands. Booster pump stations are reaching capacity and additional pumps are required to meet demands. At some of the booster pump stations, the equipment is dated, and parts are no longer available, so new equipment is required. An estimated \$11.1 million will be spent over the next five years.

- Major Wastewater Capital Projects

- Sewer Collection System Improvements - Design and construct sewer lines, treatment plant work and rehabilitate sewer manholes in the aging sewer system per the Asset management Program. Many of the sewer lines in the city have been in use for well over 30 years. The city is being proactive to avoid serious problems in the sewer system resulting from the aging infrastructure. In conjunction with the Asset Management Program, sewer lines will be videotaped to find potential problems, and design will be initiated to correct any identified problems. Additionally, this project will replace undersized sewer lines and provide new infrastructure to support higher density development associated with Downtown revitalization. This project will also include minor design, maintenance and construction modifications to various wastewater treatment plant infrastructure and lift stations as driven by findings of the Department's System Asset Management

Program. Costs of maintaining and expanding the wastewater collection system are estimated at \$34.6 million over the next five years.

- SROG WWTP and Collection System - As part of the multi-city Sub-Regional Operating Group (SROG) intergovernmental agreement, the City shares in the capital and operating costs for the jointly owned 91<sup>st</sup> Avenue Wastewater Treatment Plant (WWTP) and the sewage collection lines that deliver the City's sewage to the 91<sup>st</sup> Avenue WWTP. The City's contribution to ongoing improvements and expansion of the 91<sup>st</sup> Avenue WWTP and the related sewage collection line, capacity management and interceptor odor control, is programmed at approximately \$26.2 million over the next five years.

- Water and Wastewater Rate Structures

- Water Rate Structure - Water rate structures play an essential role in communicating the value of water to customers, thus promoting long-term efficient use. Increasing block rate structures most effectively communicate this message and encourage efficient water use when compared to other types of rate structures. Through this increasing block rate design, the unit price for water increases as the volume consumed increases, with prices being set for each "block" of water use. Customers who use low volumes of water are charged a modest unit price and rewards conservation; those using higher volumes pay higher unit prices.

The City's water rate structure consists of a monthly base service charge, which is based on the size of the water meter, and a monthly quantity usage charge, which is based on the amount of water used. A five-tier increasing block rate structure is used to determine the water usage charge for single family residential accounts. A four-tier increasing block rate structure is used for multi-family residential, commercial/industrial, and non-residential landscape/irrigation customers. The tiers are intended to provide a pricing incentive to differentiate between responsible water use and excessive use primarily associated with high levels of outdoor watering of turf areas with treated drinking water. The proposed rate schedule which now includes a separate structure for landscape/irrigation customers is shown as Exhibit A.

- Wastewater Rate Structure - The City's wastewater rate structure consists of a user charge for operation, maintenance and replacement costs and another charge for debt service and capital costs. The charge varies by customer classification based upon relative sewage strengths. A customer service charge is billed to wastewater customers and for fiscal year 2013/14 the environmental charge of 18.953% is now included in the user charge, capital charge and customer service charge. Wastewater customers are billed based on 90% of their average water consumption for the months of December, January and February of the prior year. If a customer experiences an unusual amount of indoor and/or outdoor water use during these months, the customer may request an adjustment by completing a "Water Resources Sewer Adjustment Form". The proposed wastewater rate schedule is shown as Exhibit B.

- Rate History and Benchmarking

- Rate History - A key objective of the City's comprehensive planning effort is to keep the combined increases to water and wastewater at or below the change in

the Consumer Price Index. The City has been consistently below the CPI for the last ten years as shown in the table below.

### SUMMARY OF ANNUAL UTILITY RATE INCREASES

Fiscal Year	Water % Increase	Wastewater % Increase	Solid Waste % Increase	Combined Utility Bill	CPI*
2003/04	3.0	2.5	0.0	2.3	4.5
2004/05	2.5	3.0	0.0	2.5	5.4
2005/06	3.5	4.0	0.0	2.2	5.2
2006/07	5.5	6.0	2.5	4.3	4.8
2007/08	5.5	6.0	2.5	3.9	5.4
2008/09	5.5	6.0	4.0	4.9	6.5
2009/10	2.5	3.0	2.0	2.4	5.6
2010/11	0	0	0	0	5.7
2011/12	0	0	0	0	4.7
2012/13	0	0	0	0	5.7

\* This is the percentage change for "Water, wastewater and trash collection services" as reported by the US Department of Labor in the *Consumer Price Index Report (CPI-U), Table 1. Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, by expenditure category and commodity and service group.*

- **Benchmarking** - The following table presents the proposed City of Scottsdale monthly utility charges in comparison with other local communities. This comparison is based on use of a 5/8 inch water meter, 11,500 gallons of water usage, 8,000 gallons of wastewater usage and a single trash/recycle container.

### RESIDENTIAL UTILITY BILL COMPARISON

City or Town	Water Charges	Wastewater Charges	Solid Waste Charges	Total Bill Excluding Taxes
Chandler	\$27.95	\$22.17	\$15.07	\$65.19
Gilbert	\$27.14	\$25.82	\$16.00	\$68.96
COS Proposed	\$37.53	\$23.43	\$15.96	\$76.92
COS Current	\$38.60	\$22.52	\$15.96	\$77.08
Tempe	\$34.33	\$23.58	\$19.98	\$77.89
Peoria	\$40.57	\$24.86	\$13.10	\$78.53
Glendale	\$37.28	\$37.68	\$16.30	\$91.26
Phoenix	\$36.42	\$30.46	\$26.80	\$93.68
Mesa	\$44.94	\$28.54	\$23.34	\$96.82

Although Scottsdale's water charges are higher than several other cities there are system characteristics that significantly impact the costs which include but are not limited to: (1) a heavier reliance on the more expensive CAP surface water supplies versus the significantly less expensive Salt River Project (SRP) water supply; (2) larger impacts of arsenic regulations on Scottsdale's groundwater supplies and (3) elevation changes. Since Scottsdale must use higher percentages of both CAP



water and groundwater, the water costs in Scottsdale are unavoidably higher than many neighboring municipalities.

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### **III. Financial Planning Process**

In conjunction with the budget process and based on the most current Water Resources Master Plans, the City develops and maintains a comprehensive multi-year Water Resources Financial Plan, which is updated annually. The plan consists of projections of operating and capital costs of the Water and Wastewater systems, as well as projections of funding from user rates, development fees, bond issuances, interest earnings, inter-fund loans, and existing cash balances of the funds. The plan also considers projected changes to three reserves: 1) the replacement and extension reserve required by bond indenture, 2) the revenue bond reserve required by bond indenture and 3) the operating reserve funded between 60 and 90 days of budgeted expenditures. In addition, the plan considers the capital/rate stabilization balance. Consistent with American Water Works Association (AWWA) Principles of Water Rates, Fees and Charges, the City bases its water and wastewater rate increases on the cash need projections shown in the financial plan for the prospective five year period, currently fiscal year 2013/14 through fiscal year 2017/18.

#### **Water Resources Financial Planning Objectives:**

- To maintain a comprehensive financial plan which incorporates all projected operating and capital revenue and expenses of the Water and Wastewater Funds for the planning period
- To maintain a minimum ratio of revenue to debt service higher than the minimum bond indenture requirement of 1.2/1 to ensure debt coverage in times of revenue fluctuations attributable to weather or other causes, and to ensure a balanced pay-as-you-go Capital Improvement Plan
- To maintain replacement and extension reserves equal to 2% of assets in accordance with bond indenture requirements
- To provide an operating reserve funded between 60 and 90 days of budgeted operational expenditures
- To maintain a capital/rate stabilization balance in order to fund the capital program and evenly distribute necessary operating rate increases over time to minimize dramatic rate escalations in any one year
- To maintain and fund the water and wastewater funds as separate, self-sustaining enterprise funds
- To continue to develop a cost-based rate structure encouraging water conservation
- To maintain development fees which reflect current growth projections and capital needs so that growth is paying its proportionate share of these costs

The City accomplishes these financial planning objectives through the following activities:

- Periodic review of Water Resources Master Plans and the Asset Management Plan to ensure that existing and planned infrastructure and water supplies continue to be adequate to provide reliable service to existing customers and meet growth projections and that the Water Resources Capital Improvement Program incorporates these needs.
- Annual review and update of the financial plan to ensure that the plan reflects sufficient revenues to fund operating and capital cost projections, including the impact of any new state or federal regulations.
- Periodic review and adjustment of development fees to ensure that new development pays for its “proportionate share” of the capital cost of infrastructure capacity needed for growth. New development fees are established following completion of updates to the Water Resources Master Plan identifying a specific infrastructure improvement plan. Currently, the City is conducting a development fee study to insure compliance with new legislative requirements.
- Annual review and adjustment of water and wastewater rates. The City desires to keep utility bills affordable for its customers and, as part of the comprehensive planning effort, carefully considers the impact on the combined utility bill in determining the appropriate balance between rate increases and debt financing. To accomplish this, the City has a systematic planned approach that incorporates marginal rate increases from year to year in conjunction with debt financing.

The following charts summarize the forecasted cash flows for the Water and Wastewater Enterprise Funds for the five-year period. Following this chart are descriptions of the sources and uses of funds. Annual detail is presented in Section IV.

**Sources and Uses of Funds**  
**FY 2013/14 Through FY 2017/18**

Amounts in \$Millions

**Water and Wastewater Enterprise Fund**

	Water <u>Fund</u>	Wastewater <u>Fund</u>
<b>Sources of Funds</b>		
Beginning Cash	\$111.6	\$14.4
Rate Revenues	458.1	193.9
Development Fee Revenues	17.7	8.9
Other Revenues	9.0	6.9
New Bonds Issues	0.0	40.0
<b>Total Sources of Funds</b>	<u>596.3</u>	<u>264.1</u>
<b>Uses of Funds</b>		
Operating Expenses	240.7	87.5
Operating Transfers	42.9	13.4
Debt Service	92.5	56.8
Capital Improvement Expenses	133.6	77.1
<b>Total Uses of Funds</b>	<u>509.7</u>	<u>234.8</u>
<b>Ending Cash Balance</b>	<u>86.6</u>	<u>29.3</u>
<b>Less Required Reserves</b>		
Operating Reserve	12.4	4.1
Replacement & Extension Reserve	18.0	11.9
Revenue Bond Reserve	0.0	4.6
<b>Capital / Rate Stabilization Balance</b>	<u><u>\$56.2</u></u>	<u><u>\$8.6</u></u>

## SOURCES OF FUNDS

**Beginning/Existing Cash** - Previously accumulated cash balances will contribute to the total funding sources.

**Rate Revenues** - Charges for services provided to the customer, such as metered sales in the water fund or wastewater service charges in the wastewater fund.

**Other Revenues** - Charges for services provided, including account initiation charges, connection charges, unmetered sales charges, penalties and interest earnings on cash balances.

**Development Fees Revenues** - Fees for the purpose of compensating the City for the additional costs of infrastructure and water purchases which are driven by development. The City currently charges three types of development fees:

- **Water Development Fees** - for the cost of new water treatment, production, pumping, storage and transmission facilities driven by developments
- **Wastewater Development Fees** - for the cost of wastewater capital expansion for enlargement of the publicly owned treatment works and the wastewater collection system driven by development
- **Water Resources Development Fees** - for the cost of acquiring and leasing new water supplies and for groundwater recovery driven by development

**New Bond Issuances** - The City plans to issue \$40 million in wastewater bonds during the five year planning period.

## USES OF FUNDS

**Operating Expenses** - Expenditures incurred to provide services to customers and are recovered through water and wastewater rates and charges. These include the expenses of the Water Resources Department as well as expenses of the Financial Services Department connected with water and wastewater billings and collections.

**Operating Transfers** - Transfers to the City's general fund for use of assets or for services provided including:

- **Indirect cost allocation** - a general allocation charge for services provided by the general fund for the benefit of the enterprise funds
- **Franchise fees** - a reimbursement to the general fund for the utility's use of City streets and rights-of-way. This fee is currently 5.0% of the operating revenues of the utility funds.

**Debt Service** - Annual principal and interest expense for repayment of borrowed funds. A portion of these bonds will be repaid from development fee revenues for expenditures associated with development-related projects.

**Capital Improvement Plan (CIP) Expenses** - Expenditures incurred for replacement, rehabilitation and expansion of water and wastewater infrastructure derived from the most recently updated Water and Wastewater Capital Improvement Plan.

## **IV. Five-Year Financial Plan**

The Water and Wastewater Five-Year Financial Plan for fiscal year 2013/14 through fiscal year 2017/18 begins with forecasted cash balances totaling \$111.6 million for water and \$14.4 million for wastewater.

The Water Five-Year Financial Plan does not forecast a water rate increase in the planning period. The Wastewater Five-Year Financial Plan conservatively forecasts a wastewater service rate increase of 4.0 percent in fiscal year 2013/14 and annual of 3.0 percent through fiscal year 2017/18. Total forecasted rate revenues for the five-year period are \$458.1 million for water and \$193.9 million for wastewater. Forecasted operating expenses and transfers for the five-year period total \$283.6 million for water and \$100.9 million for wastewater, including inflationary cost increases and anticipated operating impacts from capital projects that become operational during this period.

The most significant area impacting the five-year plan is the forecasted Capital Improvement Plan (CIP) expenditures that total \$210.7 million for water and wastewater. Forecasted CIP expenditures are expected to peak in fiscal year 2016/17 with a combined water and wastewater total of \$48.6 million.

The following pages provide annual detail for fiscal year 2013/14 through fiscal year 2017/18.

**Sources and Uses of Funds**  
**FY 2013/14 Through FY 2017/18**

Amounts in \$Millions

**Water Enterprise Fund**

	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>Five Year Recap</u>
<b>Sources of Funds</b>						
Beginning Cash	\$119.4	\$120.1	\$116.5	\$107.0	\$96.8	\$119.4
Rate Revenues	91.3	91.4	91.6	91.8	91.9	458.1
Development Fee Revenues	3.4	3.3	3.7	3.7	3.6	17.7
Other Revenues	1.8	1.8	1.8	1.8	1.8	9.0
<b>Total Sources of Funds</b>	<u>215.9</u>	<u>216.7</u>	<u>213.6</u>	<u>204.2</u>	<u>194.2</u>	<u>604.2</u>
<b>Uses of Funds</b>						
Operating Expenses	44.6	45.5	48.1	50.3	52.3	240.7
Operating Transfers	8.8	8.4	8.5	8.6	8.7	42.9
Debt Service	18.1	18.5	18.8	18.5	18.5	92.5
Capital Improvement Expenses	24.4	27.9	31.2	29.9	20.2	133.6
<b>Total Uses of Funds</b>	<u>95.8</u>	<u>100.2</u>	<u>106.6</u>	<u>107.4</u>	<u>99.7</u>	<u>509.7</u>
<b>Ending Cash Balance</b>	<u>120.1</u>	<u>116.5</u>	<u>107.0</u>	<u>96.8</u>	<u>94.5</u>	<u>94.5</u>
<b>Less Required Reserves</b>						
Operating Reserve	11.0	11.0	11.7	12.2	12.4	12.4
Replacement & Extension Reserve	17.8	17.8	17.9	17.9	18.0	18.0
Revenue Bond Reserve	0.2	0.1	(0.0)	(0.0)	(0.0)	(0.0)
<b>Capital / Rate Stabilization Balance</b>	<u>\$28.9</u>	<u>\$28.9</u>	<u>\$29.5</u>	<u>\$30.1</u>	<u>\$30.4</u>	<u>\$30.4</u>
Debt Coverage Ratio/Includes 50% of Development Fees	2.1%	2.0%	1.8%	1.8%	1.7%	

**Sources and Uses of Funds**  
**FY 2013/14 Through FY 2017/18**  
Amounts in \$Millions  
**Wastewater Enterprise Fund**

	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>Five Year Recap</u>
<b>Sources of Funds</b>						
Beginning Cash	\$14.4	\$31.8	\$24.4	\$21.0	\$32.4	\$14.4
Rate Revenues	36.5	37.6	38.7	39.9	41.2	193.9
Other Revenues	1.6	1.7	1.8	1.8	2.0	8.9
Development Fee Revenues	1.3	1.3	1.3	1.3	1.6	6.9
New Bonds Issues	20.0	-	-	20.0	-	40.0
<b>Total Sources of Funds</b>	<b>73.8</b>	<b>72.4</b>	<b>66.2</b>	<b>84.1</b>	<b>77.2</b>	<b>264.1</b>
<b>Uses of Funds</b>						
Operating Expenses	16.2	16.8	17.4	18.3	18.8	87.5
Operating Transfers	2.6	2.6	2.7	2.7	2.8	13.4
Debt Service	11.4	10.6	10.7	12.0	12.2	56.8
Capital Improvement Expenses	11.9	18.1	14.4	18.7	14.1	77.1
<b>Total Uses of Funds</b>	<b>42.1</b>	<b>48.0</b>	<b>45.2</b>	<b>51.7</b>	<b>47.9</b>	<b>234.8</b>
<b>Ending Cash Balance</b>	<b>31.8</b>	<b>24.4</b>	<b>21.0</b>	<b>32.4</b>	<b>29.3</b>	<b>29.3</b>
<b>Less Required Reserves</b>						
Operating Reserve	3.7	3.7	3.8	4.0	4.1	4.1
Replacement & Extension Reserve	10.4	10.8	11.1	11.5	11.9	11.9
Revenue Bond Reserve	4.6	4.6	4.6	4.6	4.6	4.6
<b>Capital / Rate Stabilization Balance</b>	<b>\$13.1</b>	<b>\$5.3</b>	<b>\$1.4</b>	<b>\$12.2</b>	<b>\$8.6</b>	<b>\$8.6</b>
Debt Coverage Ratio/Includes 50% of Development Fees	1.6%	1.8%	1.8%	1.6%	1.7%	

**Capital Project Expenditures - Cash Flow Forecast  
FY 2013/14 through FY 2017/18**

Amounts in \$Millions

**Water and Wastewater Enterprise Funds**

<u>Project</u>	<u>Project Description</u>	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>Total</u>
W9912	Water Distribution System Improvements	\$10.3	\$9.5	\$12.0	\$9.5	\$8.0	<b>\$49.3</b>
V3704	Sewer Collection System Improvements	4.5	9.5	7.5	6.0	7.1	<b>34.6</b>
W1102	Chaparral WTP Pretreatment	2.4	8.0	11.8	3.8	-	<b>26.0</b>
W9903	Booster Station Upgrades	5.2	4.0	0.8	0.5	0.6	<b>11.1</b>
TEMP	SROG SRO/SAI Interceptor Odor Control	0.5	1.0	1.0	8.2	0.1	<b>10.8</b>
W0603	Zone 14/16 Water Improvements	0.2	-	0.3	7.0	3.0	<b>10.4</b>
V0402	SROG Sewage Transmission Line	-	1.2	2.5	1.8	3.5	<b>9.0</b>
W8515	Deep Well Recharge/Recovery Facilities	0.9	0.1	0.6	2.4	1.8	<b>5.7</b>
Y1324	SROG Wastewater Treatment Plant	0.5	1.0	1.0	1.0	1.0	<b>4.5</b>
V1201	Hydrogen Sulfide Mitigation	2.0	2.1	0.4	-	-	<b>4.5</b>
W4708	Well Sites	1.0	1.5	-	-	-	<b>2.5</b>
V0501	Core North/South Sewer (stacked 40's)	0.2	1.5	0.6	-	-	<b>2.3</b>
TEMP	Secondary Clarifier Rehab	1.8	0.6	-	-	-	<b>2.3</b>
W1301	Gravity Thickener	1.1	1.0	-	-	-	<b>2.1</b>
V0902	Downtown Sewer Trunk Lines	0.3	0.3	0.5	0.5	0.3	<b>1.8</b>
TEMP1150	Chaparral WTP R&R Sod Hypo Gen Syst.	-	-	0.6	1.1	-	<b>1.6</b>
V1301	SROG Operating & Solids Improvements	-	-	0.3	0.3	0.9	<b>1.5</b>
W0801	Water Participation Program	0.3	0.4	0.4	0.4	0.0	<b>1.5</b>
W0501	Cross Roads East Water	-	0.6	0.8	-	-	<b>1.4</b>
TEMP1026	CAP 4 Plant Expansion	-	-	-	-	1.3	<b>1.3</b>
W0708	Well Sites Rehabilitation	0.1	0.1	0.1	0.5	0.4	<b>1.2</b>
V4001	Radio Telemetry - Monitoring Automation (Sewer)	0.2	0.3	0.3	0.3	0.2	<b>1.2</b>
V8620	Master Plan - Water Reclamation	0.3	0.1	0.0	0.3	0.4	<b>1.2</b>
V0704	Water Reclamation Security Enhancements	0.6	0.1	0.1	0.1	0.2	<b>1.1</b>
Y1326	Water System Security Enhancements	0.4	0.2	0.2	0.3	0.1	<b>1.1</b>
	Miscellaneous	2.8	1.1	0.7	0.4	1.7	<b>6.7</b>
	<b>Total Cash Flow (Un-Inflated)</b>	<b>35.5</b>	<b>44.0</b>	<b>42.3</b>	<b>44.3</b>	<b>30.5</b>	<b>196.5</b>
	Cash Flow Adjustments & Adjustments	0.8	1.9	3.3	4.3	3.8	<b>14.2</b>
	<b>Adjusted Cash Flow - CIP Total</b>	<b>\$36.3</b>	<b>\$45.9</b>	<b>\$45.6</b>	<b>\$48.6</b>	<b>\$34.3</b>	<b>\$210.7</b>



## **Exhibits**

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The following exhibits include the proposed water and wastewater rate schedules and miscellaneous charge updates.

## EXHIBIT A



# Water Rates Schedule

Proposed To Be Effective July 1, 2013

BASE FEES	
All Customer Classes	
5/8"	\$10.75
3/4"	\$14.00
1"	\$20.00
1 1/2"	\$25.00
2"	\$35.00
3"	\$45.00
4"	\$100.00
6"	\$200.00
8"	\$300.00

COMMODITY RATES			
Tier #	Rate per 1,000 Gal	Gallons of Use	
Single Family Residential and Landscape/Irrigation by Single Family			
		From	To
1	\$1.65	0	5,000
2	\$2.85	5,001	12,000
3	\$3.45	12,001	40,000
4	\$4.50	40,001	70,000
5	\$5.00	Over 70,000	
Multi-Family Residential/ Commercial/Industrial/ Non-Residential			
		From	To
1	\$1.65	0	2,500
2	\$2.80	2,501	6,000
3	\$3.40	6,001	20,000
4	\$3.70	Over 20,000	
Landscape/Irrigation by Multi-Family Residential/ Commercial/Industrial/ Non-Residential			
		From	To
1	\$1.65	0	2,500
2	\$2.80	2,501	6,000
3	\$3.40	6,001	20,000
4	\$3.70	Over 20,000	

### Notes:

In addition to the rates charged in this section: 1) a stormwater account charge of eighty-five cents (\$0.85) per month and 2) a State of Arizona water quality assurance fee of \$0.0065 per 1,000 gallons will be added to the total of all water charges calculated in accordance with the above rate schedules. Applicable privilege tax and other taxes will be added.

Source: City of Scottsdale Revised City Code, Section 49-48

### Financial Services Department – Utility Billing Office

7447 E Indian School Road, Suite 110, Scottsdale, AZ 85251 • Phone: 480-312-2461 • Fax: 480-312-4803

## EXHIBIT B



# **Sewer Rates Schedule**

## **Proposed To Be Effective July 1, 2013**

**Official Schedule of City of Scottsdale Rates and Fees at: [www.scottsdaleaz.gov](http://www.scottsdaleaz.gov) - keyword "Fees".**

User Category	O&M User Charge Per 1,000 Gallons	Capital & Other Charges Per 1,000 Gallons	Total Sewer Service Charge Per 1,000 Gallons <sup>(1)</sup>	Monthly Minimum Charge Before Taxes <sup>(2)</sup>
Single-family Residential	1.11	1.65	2.76	\$14.87
Multi-family Residential	1.11	1.65	2.76	\$9.27
Commercial without dining	1.05	1.65	2.70	\$14.87
Commercial with dining	1.42	1.65	3.07	\$14.87
Hotels, motels without dining	1.16	1.63	2.80	\$14.87
Hotels, motels with dining	1.62	1.66	3.28	\$14.87
Carwashes	0.95	1.65	2.60	\$14.87
Commercial Laundry	1.76	1.63	3.39	\$14.87
Mortuaries	2.23	1.63	3.86	\$14.87
Laundromats	1.09	1.63	2.72	\$14.87
Metal Platers	1.11	1.65	2.76	\$14.87
Restaurants ; bakeries	2.97	1.63	4.60	\$14.87
Service station auto repair	1.16	1.63	2.80	\$14.87
Medical Institutes	1.29	1.65	2.93	\$14.87
Schools	1.09	1.63	2.72	\$14.87
Non compliant	See below	See below	See below	Various

### **Notes:**

<sup>(1)</sup> The monthly sewer service charge is calculated by multiplying 90% of the customer's average water consumption for the prior December, January and February by the rates shown above. In addition, a customer service charge of \$1.35 per account is added. Applicable city tax is added for customers located within the City of Scottsdale.

<sup>(2)</sup> The monthly minimum charge includes the customer service charge. The Multi-family Residential minimum charge is per dwelling unit. Applicable city tax is added for customers located within the City of Scottsdale.

Non compliant- Once a customer is designated as non compliant, the then current O & M and Other Charges will be adjusted by one hundred and fifty percent (150%) for a minimum period of six months.

Source: City of Scottsdale Revised City Code, Section 49-141.

## **Financial Services Department – Utility Billing Office**

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## EXHIBIT C

MISCELLANEOUS FEES AND CHARGES				
Description	Current Fee	Phase in Increase	Proposed Fee	Reason for increase
Phase in over two years				
5/8 " Water Meter & Installation	\$675	\$133	\$808	AMR devise, copper increases
3/4" Water Meter & Installation	\$700	\$130	\$830	AMR devise, copper increases
1" Water Meter & Installation	\$810	\$154	\$964	AMR devise, copper increases
1.5" Water Meter & Installation	\$1,180	\$358	\$1,538	AMR devise, copper increases
2" Water Meter & Installation	\$1,545	\$305	\$1,850	AMR devise, copper increases
1.5" Water Meter - Fire sprinkler	\$915	\$322	\$1,237	Copper and labor increases
2" Water Meter - Fire sprinkler	\$1,190	\$268	\$1,458	Copper and labor increases
1.5" Water Meter Only (Incl. delivery)	\$270	\$87	\$357	AMR devise, copper increases
2" Water Meter Only (Incl. delivery)	\$350	\$93	\$443	AMR devise, copper increases
Check For Water Leak	\$35	\$9	\$44	Labor and equipment increases
Move Water Meter (up to 15 ft.)	\$275	\$24	\$299	Labor and equipment increases
Raise or Lower Water Meter	\$105	\$48	\$153	Labor and equipment increases
Hydrant meter deposit 1" meter	\$200	\$50	\$250	Encourage return if the meter
Hydrant meter deposit 3" meter	\$1,000	\$100	\$1,100	Encourage return if the meter
Hydrant Meter Install & Remove	\$15	\$35	\$50	Labor and equipment increases
Move Hydrant Meter	\$10	\$15	\$25	Labor and equipment increases
Account Establishment Fee	\$7	\$5	\$12	Cost recovery
Phase in over three years				
5/8" Water Meter Only (Incl. delivery)	\$70	\$52	\$122	AMR devise, copper increases
3/4" Water Meter Only (Incl. delivery)	\$95	\$51	\$146	AMR devise, copper increases
1" Water Meter Only (Incl. delivery)	\$140	\$52	\$192	AMR devise, copper increases
Shutdown Water Main	\$100	\$43	\$143	Labor and equipment increases
No phase in				
Same Day Service	\$35	\$2	\$37	Cost recovery
Tampering with meters	\$100	\$400	\$500	Deter tampering
Unauthorized service line connection	\$100	\$400	\$500	Deter tampering
Unauthorized fire hydrant connection	\$200	\$300	\$500	Deter tampering
Hydrant Meter Account Establishment fee	\$0	\$15	\$15	Cost recovery